

In re Application of: Moore et al.
Application No.: 09/840,569

Amendments to the Claims

- 1-17. (Cancelled)
18. (Original) A method for determining a connectivity type for a computing device's network interface, the method comprising:
- if an address of the computing device on the interface is a valid, private address, and if no gateway is found on the interface, then determining that the interface's connectivity type is ad hoc;
 - else if an address of the computing device on the interface is a valid, public address, and if a specific name server is configured on the interface, and if a domain is configured on the interface, then determining that the interface's connectivity type is managed;
 - else if an address of the computing device on the interface is a valid address, and if a connectivity services beacon is received on the interface, then determining that the interface's connectivity type is unmanaged;
 - else determining that the interface's connectivity type is unknown.
19. (Original) A computer-readable medium having instructions for performing the method of claim 18.
20. (Original) A method for determining whether a computing device's network interface has connectivity to the Internet, the method comprising:
- if an address of the computing device on the interface is invalid, or if no gateway is configured on the interface, or if no specific name server is configured on the interface, then determining that the interface does not have connectivity to the Internet;
 - else if an Internet name can be resolved using a name server configured on the interface, then determining that the interface has connectivity to the Internet;
 - else determining that the interface does not have connectivity to the Internet.
21. (Original) A computer-readable medium having instructions for performing the method of claim 20.

22. (New) A method for providing network connectivity information to an application running on a computing device, the method comprising:
 - applying a first set of discovery techniques to discover aspects of a first network to which the computing device is connected;
 - applying a second set of discovery techniques to discover aspects of a second network to which the computing device is connected, the first and second sets of discovery techniques differing, at least in part; and
 - providing discovered aspects of the first and second networks to the application via a common application programming interface.
23. (New) The method of claim 22 wherein discovered aspects of the first network comprise information selected from the set consisting of: a connectivity type for the first network and whether the first network has connectivity to the Internet.
24. (New) The method of claim 23 wherein the connectivity type is selected from the set consisting of: ad hoc, managed, unmanaged, and unknown.
25. (New) The method of claim 22 further comprising:
 - notifying the application when discovered aspects of the first network change.
26. (New) A computer-readable medium having instructions for performing a method for providing network connectivity information to an application running on a computing device, the method comprising:
 - applying a first set of discovery techniques to discover aspects of a first network to which the computing device is connected;
 - applying a second set of discovery techniques to discover aspects of a second network to which the computing device is connected, the first and second sets of discovery techniques differing, at least in part; and
 - providing discovered aspects of the first and second networks to the application via a common application programming interface.

27. (New) A method for providing network connectivity information to an application running on a computing device, the method comprising:
 - gaining connectivity to a network;
 - discovering aspects of the network;
 - associating a first name with the network, the first name unique within the context of the computing device;
 - providing the first name to the application as a key for accessing the discovered aspects of the network;
 - losing connectivity to the network;
 - regaining connectivity to the network;
 - rediscovering aspects of the network; and
 - associating a second name with the network, wherein the second name is the same as the first name.
28. (New) The method of claim 27 wherein the first name is based on information selected from the set consisting of: DNS domain name, static information provided by a user of the computing device, subnet address, and 802.1X network identity string.
29. (New) The method of claim 27 further comprising:
 - correlating the first name with a network interface on the computing device through which the network may be accessed.
30. (New) The method of claim 27 further comprising:
 - correlating the first name with application programming interfaces of transport protocols supported by the network.

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31. (New) A computer-readable medium having instructions for performing a method for providing network connectivity information to an application running on a computing device, the method comprising:
- gaining connectivity to a network;
 - discovering aspects of the network;
 - associating a first name with the network, the first name unique within the context of the computing device;
 - providing the first name to the application as a key for accessing the discovered aspects of the network;
 - losing connectivity to the network;
 - regaining connectivity to the network;
 - rediscovering aspects of the network; and
 - associating a second name with the network, wherein the second name is the same as the first name.